

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE SPECIFICATION

The specification has been amended to add section headings as suggested by the Examiner. No new matter has been added, and it is respectfully requested that the amendments to the specification be approved and entered.

THE CLAIMS

Withdrawn claims 20-27 have been canceled. An amendment to the inventorship under 37 CFR 1.48(b) is submitted herewith.

THE PRIORITY DOCUMENT

On page 2 of the Office Action, the Examiner indicates that the applicant has not filed a certified copy of the Swedish priority application.

It is respectfully pointed out, however, that the present application is a national stage application of an international application, and that the USPTO should have requested the International Bureau to furnish the copy of the certified priority document. See MPEP 1893.03(c) II. Accordingly, if the USPTO has not yet requested the certified copy from the

International Bureau, it is respectfully requested that the USPTO do so now.

THE PRIOR ART REJECTION

Claims 10 and 15 were rejected under 35 USC 102 as being anticipated by USP 3,901,098 ("Jinkins"); claims 11-13 and 16-18 were rejected under 35 USC 103 as being obvious in view of the combination of Jinkins and USP 7,216,749 ("Droste"); and claims 14 and 19 were rejected under 35 USC 103 as being obvious in view of the combination of Jinkins and USP 6,709,161 ("Yakura et al"). These rejections, however, are respectfully traversed.

The object of the present invention is to provide an adjusting device for setting the axial position of a drive spindle pinion in relation to a bevel gear of an angle drive. The present invention aims to improve the gear teeth engagement between the spindle pinion and the bevel gear to thereby extend the service life of the angle drive. The severe load encountered by the teeth of an angle drive of a power tool, such as a power wrench, causes a rather rapid wear of the teeth. It is desirable to improve the pinion-bevel gear engagement by ensuring a perfect contact between their teeth to prolong the service life of the angle drive (and, hence, the intervals between service and repair of the power tool). It is also an object of the present invention to provide an axial position adjusting mechanism for a

drive spindle pinion that is easy to operate and does not require any time consuming trial and error procedure.

The present invention as recited in claim 10 achieves these objects by providing a structure in which the inner ring of a drive spindle bearing is adjustable relative to the drive spindle via a thread connection, and in which a coupling device is provided for locking the inner ring in a position where proper contact between the drive spindle pinion teeth and the bevel gear teeth is obtained.

According to independent claim 10, the power tool comprises an adjusting device which sets an axial position of the drive spindle and the pinion relative to the bevel gear. As recited in claim 10, the adjusting device comprises: a threaded portion on the drive spindle; an internal thread formed integrally with the inner ring and arranged to cooperate with the threaded portion on the drive spindle; and a coupling device arranged to rotationally lock the inner ring relative to the drive spindle as a desired axial position of the drive spindle is obtained.

The Examiner asserts that Jinkins discloses an adjusting device as recited in claim 10. See the bottom of page 3 and top of page 4 of the Office Action. Jinkins, however, does not in fact disclose an adjusting device as recited in claim 10.

Jinkins does disclose an angle drive including an axially adjustable drive spindle for setting a correct engagement between

the teeth of the angle drive pinion and bevel gear. It is respectfully pointed out, however, that Jinkins discloses using shims 12 to perform the adjustment. See column 2, lines 56-58, column 3, lines 22-25, and the drawing of Jinkins. Indeed, the thread connection pointed to by the Examiner as an adjusting device in Jinkins is in fact a rigid joint for securing the drive adapter 6 to the shaft portion 7. See column 2, lines 45-48 of Jinkins.

It is respectfully submitted that Jinkins does not disclose or suggest a thread-based adjusting device as according to the present invention as recited in claim 10. In fact, Jinkins represents prior art over which the present invention is an improvement. The previously employed method described by Jinkins using shims to set a desired axial positions of the drive spindle pinion in relation to the bevel gear is rather time consuming. Jinkins requires a trial and error procedure with a different number of shims to obtain the desired spindle position before the final assembly of the angle drive.

With the structure of the present invention as recited in claim 10, by contrast, a more convenient and less time-consuming method for setting a desired drive spindle position is achieved using the adjusting device whereby the inner ring of a drive spindle bearing is adjusted via a threaded connection between the bearing inner ring and the spindle. This new position setting

device makes it possible to set the axial position of the drive spindle after assembly of the angle drive, which is a simpler and less time-consuming procedure.

Accordingly, it is respectfully submitted that Jinkins does not disclose, teach or suggest the structural features or advantageous effects of the power tool recited in claim 10.

The Examiner has cited Droste with respect to claims 11-13 and 16-18. Droste discloses an overload clutch mechanism for an impact type power tool. This mechanism comprises a gear wheel supported on a sleeve which is axially displaceable relative to a drive spindle. However, the axial position of the spindle is not adjustable, and there is no angle drive with a spindle pinion engaging a bevel gear. Accordingly, Droste does not describe a power tool having an angle drive, and is unrelated to the angle drive problem to which the invention is a solution. Since Jinkins and Droste describe completely different types of power tools with no common functional or structural features, the combination of Droste and Jinkins suggested by the Examiner would not be a conceivable option to one of ordinary skill in the art, and there is no indication why a combination of these two references could be a conceivable measure for any person of ordinary skill in the art.

In any event, it is respectfully submitted that even if the combination of Jinkins and Droste were reasonable, the

combination of these references would still not achieve or render obvious the structure recited in independent claim 10.

In view of the foregoing, it is respectfully submitted that the present invention as recited in independent claim 10 and claims 11-19 depending therefrom clearly patentably distinguishes over Jinkins, Droste and Yakura et al under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

/Douglas Holtz/

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